

A SYSTEM AND METHOD TO INITIALIZE A MULTIPLE FUNCTION  
DEVICE WITH A MULTI-PART BOOT ALGORITHM

ABSTRACT OF THE DISCLOSURE

5           A method for "booting up" a multiple function device that  
involves first detecting the activation of the multiple function  
device. A 1<sup>st</sup> boot algorithm, retrieved from read-only memory,  
is executed to identify the location of a 2<sup>nd</sup> boot algorithm.  
The 2<sup>nd</sup> boot algorithm, retrieved from a specified location based  
10   on the booting inputs, is verified for executability. When the  
2<sup>nd</sup> boot algorithm is executable, it is executed to retrieve the  
functional algorithms that configure the multiple function device  
in the desired configuration. When the 2<sup>nd</sup> boot algorithm is not  
executable, and the multiple function device is operably coupled  
15   to a host, the correct functional algorithm or a default  
functional algorithm is downloaded and executed to configure the  
multiple function device. When an executable functional  
algorithm cannot be retrieved from memory or the host, the  
multiple function device powers down after a predetermined amount  
20   of time.